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(54) Title: PRODUCTION PROCESS OF GAMMA-CYHALOTHRIN

(57) Abstract: A process for the preparation of gamma-cyhalothrin comprising a) chlorinating 1R *cis*-Z 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylic acid to give 1R *cis*-Z 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylic acid chloride; b) esterifying 1R *cis*-Z 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylic acid chloride with 3-phenoxy benzaldehyde in the presence of a source of cyanide to form a diastereoisomeric mixture of cyhalothrin isomers and c) epimerising the diastereoisomeric mixture under conditions in which the least soluble diastereoisomer crystallises from solution.

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 2 000 764 A (ICI LTD) 17 January 1979 (1979-01-17) cited in the application	1-4
X	page 1, line 28 - line 42; table I page 3, line 1 - page 4, line 39; claims 3,11,12,14,15; examples 6,7	5
Y	US 3 835 176 A (MATSUO T ET AL) 10 September 1974 (1974-09-10) column 1, line 4 - line 43 column 2, line 41 - line 64 column 3, line 49 - line 56 column 3, line 65 - column 4, line 20; example 4	1-4

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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